

Climatological Data for October, 1909.
DISTRICT No. 3, OHIO VALLEY.

FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

Unseasonably cool weather, as a rule, prevailed over the district during nearly the whole month. Frost and freezing temperatures were of frequent occurrence. In West Virginia, western Pennsylvania, Kentucky, and over much of the district north of the Ohio River the temperature averaged the lowest for any October, with one or two exceptions, during the past twenty years. Rainfall was somewhat in excess of the average October amounts in Indiana and in parts of Illinois and West Virginia, and was either nearly normal or below over the rest of the district. Snow fell on several days in various parts of the district. As much as 4 inches fell during the month at one or two stations in West Virginia, while flurries occurred as far south as Tennessee and northern Georgia.

TEMPERATURE.

The temperature was below normal at all stations in the district. Over considerable portions of western Tennessee and central-southern Kentucky the deficiency was less than 1°, while over the Cumberland table-land of western Tennessee, in southwestern Kentucky, the Scioto Valley of Ohio, and the Allegheny Basin of Pennsylvania the deficiency was 6° or more, and over the north-central portion of Indiana it was more than 7°. Over the rest of the district the temperature was from 2° to 4° below the October average. The month began comparatively warm and quite warm weather prevailed during the first decade, particularly the period 7-10th, when maximum temperatures of 70° to 90° occurred generally. During the second decade it was universally unseasonably cold, freezing temperature and killing frost occurring in practically all parts of the district. The first two or three days of the third decade and the last two days of the month were quite warm, the maximum temperature registering between 70° and 80° over large areas. Unseasonably cold weather again prevailed during the period 25-29th. In West Virginia temperatures of 14° to 20° were registered on the morning of the 29th.

PRECIPITATION.

Clear weather prevailed over the district the first 8 or 9 days, there being only a few scattered light showers in any section. In the period 10-12th, a general storm passed over the upper Mississippi and Ohio valleys, bringing general and quite heavy rains. The rainfall was especially heavy in West Virginia, Maryland, Pennsylvania, western Virginia, North Carolina, Tennessee, and parts of Kentucky. Another general storm caused rains on the 14-15th, when they were especially heavy in the southern parts of the district. In the period 17-24th, moderate to heavy rains were more or less general. The heaviest occurred in Illinois, Indiana, Pennsylvania, and West Virginia. After the 24th there was no rain of consequence. The rainfall for the month was deficient, averaging less than 2 inches over southern Illinois, the greater portion of Kentucky, the western portion of West Virginia, eastern Ohio, and extreme western Pennsylvania. The amount was less than 1 inch in southwestern Illinois and in the Mahoning Valley of Ohio. There were between 4 and 5 inches in the upper basin of the Tennessee River, in the southeastern Monongahela Basin in West Virginia, in the Miami Basin of Ohio, and in central and southern Indiana. Over the remainder of the district the rainfall was between 2 and 4 inches, about the average seasonal amount. Snow occurred in the mountains of West Virginia on the 11th, in Ohio, eastern Kentucky, and Indiana on the 12th; in Tennessee on the 13th, and in West Virginia, northern Indiana, Illinois, and Tennessee on the 15th; in Indiana and

Illinois on the 20th; in West Virginia on the 23d; in most of the district north of the Ohio River, and in West Virginia, southwestern Virginia, and Tennessee on the 24th; and in northern Georgia on the 26th. The amounts were generally not more than traces, however, except in West Virginia, where the total fall was as much as 4 inches at one or two points. Ice formed in northern Georgia on the 13th.

Rainfalls of 2.50 inches, or more, in twenty-four hours occurred as follows:

Great Kanawha watershed: 2.55 inches at Lewisburg and 2.50 inches at Marlinton, W. Va., and 2.82 inches at Galax, Va., on the 11th.

Tennessee watershed: 2.98 inches at Andrews, and 2.68 inches at Bryson City, N. C., on the 14th; 3.55 inches at Bridgeport, Ala., on the 13-14th; 2.67 inches at Tuscumbia, Ala., and 3.15 inches at Waynesboro, Tenn., on the 14th.

White River watershed: 2.60 inches at Eminence, Ind., on the 23d, and 3.13 inches at Mount Vernon, Ind., on the Ohio River watershed, on the 20th-21st.

In addition to the above, the following heavy rainfalls occurred for short periods:

Dunlap, Tenn., 1.05 inches in thirty minutes on the 15th, and at Palmetto, Tenn., 1.75 inches in thirty minutes on the 14th.

During the night of the 13th and early morning of the 14th severe storms, tornadic in character, occurred in northern Alabama and in the southwest and south-central counties of Tennessee. Trees were uprooted, a few houses and barns were blown down in Madison County, Alabama, and considerable damage done to timber, buildings, telegraph, and telephone lines. No lives were lost in Alabama, but in Tennessee 29 persons were killed and over 100 injured. The property loss amounted to \$150,000, or more. Heavy hail attended these storms in localities in both these States. The section director at Nashville, Tenn., reports as follows:

Very severe local storms, assuming the violence of tornadoes in some places, occurred in the southwestern and south-central counties on the afternoon of the 14th. The storms were most destructive in Madison, McNairy, and Hardin counties. The number of persons reported killed in Madison County was 1; Hardin, 20; McNairy, 8. The reports were not considered entirely reliable and complete. Probably 100 people, in all, were injured. Many houses were destroyed or damaged, fences, timber, and crops were blown down and a considerable number of stock killed. The property loss at Clifton, Wayne County, was \$5,000; Hamburg, Hardin County, \$60,000; Buford Station, Giles County, \$9,000; Pittsburg Landing, Hardin County, \$75,000; Stantonville, McNairy County, \$1,500. At Dunlap hailstones, half round in shape, measured 5 inches in diameter.

Severe hailstorms on the same dates were also reported from northern Georgia. See report on the severe hailstorm at Atlanta, Ga., in summary for District No. 2.

A violent storm of reported tornadic character swept over Cambridge Springs and French Creek Valley in Crawford County, Pa., the afternoon of the 21st, injuring several persons, wrecking a score or more of residences and buildings, destroying or damaging over 100 barns and outbuildings, uprooting trees, tearing down telegraph, telephone, and electric light poles, and leveling fences.

The 22-23d a general storm passed over the central and upper Ohio valleys, attended by severe thunderstorms and squalls. Considerable damage resulted, especially in the northern and eastern parts of Kentucky. These storms, as far as could be learned, were not tornadic in character, but were simply windsqualls accompanying thunderstorms. There were no fatalities, although there were a number of narrow escapes. The damage was greatest in the vicinity of Louisville and

Frankfort, Ky. In these localities there were a number of tobacco barns, farm houses, and fences blown down. Haystacks and shocked corn also suffered to a large extent. There was also considerable damage to orchards, shade trees, and telegraph and telephone wires. Some minor damage also resulted from these storms in the portions of Indiana and Ohio bordering the Ohio River.

On the 15th local storms of tornadic characteristics de-

stroyed several houses and killed a number of cattle in the vicinity of Lafayette, Ga.

During a thunderstorm near Robinson, Ill., on the 23d, 70,000 barrels of crude oil were destroyed.

The streams, on account of the timely rains, were, in the main, at higher stages during the month than in October of last year. Droughty conditions, which frequently prevail during the month of October, were absent.

MONTHLY WEATHER REVIEW.

OCTOBER, 1909

TABLE 1.—Climatological data for October, 1909. District No. 3, Ohio Valley.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Number of rainy days, .01 inch or more.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.					
				Mean.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Greatest in 24 hours.										
New York.																					
Allegany.	Cattaraugus.	1,441	3	45.2	—	80	9	16	30	44	3.91	1.09	9.2	12	10	3	18	nw.			
Bolivar.	Allegany.	1,800	13	43.7	—	5.1	83	9	14	30	51	0.08	0.72	0.3	13	8	2	20	sw.		
Franklinville.	Cattaraugus.	1,598	12	43.4	—	6.1	80	9	15	30	44	4.52	+ 0.99	1.65	1.0	15	8	3	20	nw.	
Jamestown.	Chautauqua.	1,365	19																		
Olean.	Cattaraugus.																				
Maryland.																					
Deer Park ^a .	Garrett.	2,457	15	44.0	—	4.3	74	8†	20	30	47	3.51	+ 1.24	1.50	T.	5	6	13	9	w.	
Grantsville.	do.	2,351	15	45.0	—	4.9	77	9	23	20	41	4.09	+ 1.66	2.00	T.	6	12	9	9	...	
Oakland.	do.	2,461	9	45.0	—	2.7	76	7	22	20	46	4.41	+ 1.53	1.73	0.7	9	14	8	9	w.	
Pennsylvania.																					
Aleppo.	Greene.	1,135	8	49.2	—	85	9	22	29	47	2.19	—	0.75	T.	6	21	1	9	w.		
Baldwin.	Butler.	1,404	3	46.8	—	82	8†	23	20	44	2.55	—	1.50	T.	10	12	3	16	w.		
California.	Washington.	770	6	49.8	—	84	10	23	20	46	3.00	—	1.40	T.	4	19	5	7	w.		
Claysville.	do.	1,127	5	49.1	—	85	9	24	29	48	2.12	—	0.84	T.	8	14	9	8	w.		
Derry Station.	Westmoreland.	1,172	12	48.6	—	6.3	84	9	25	30	50	2.73	—	0.08	T.	5	10	9	12	w.	
Franklin.	Venango.	955	35	46.2	—	6.2	82	8	21	30	45	1.32	—	1.56	T.	5	11	8	12	w.	
Freepoint.	Armstrong.	772	31																		
Greensburg.	Westmoreland.	1,100	1	47.8	—	83	10	26	30	42	3.14	—	1.39	T.	9	12	8	11	sw.		
Greenville.	do.	950	13	46.7	—	2.9	83	9	20	26	50	2.11	—	1.11	T.	10	17	6	8	uv.	
Grove City.	Mercer.	1,250	2	46.3	—	81	8†	21	20	48	1.26	—	0.35	T.	13	8	6	17	w.		
Indiana.	Indians.	1,350	12	49.1 ^a	—	1.9	85 ^a	9	23 ^a	30	41	2.21	—	0.89	T.	10	15	9	7	...	
Irwin.	Westmoreland.	884	12	50.2	—	5.2	87	10	25	20	48	3.14	—	0.81	T.	6	15	9	7	...	
Johnstown.	Cambria.	1,184	21																		
Lycippus.	Westmoreland.	1,420	17	49.2	—	5.3	81	9†	27	30	36	3.28	—	0.84	T.	9	12	10	10	w.	
Pittsburgh.	Allegheny.	842	39	49.6	—	5.3	80	10	31	13	34	2.36	—	0.00	T.	5	9	12	10	...	
Saegerstown.	Crawford.	1,116	18	46.7	—	3.6	83	9	20	26	48	1.73	—	1.25	T.	17	12	12	12	w.	
St. Marys.	Elk.	1,740	11	44.9	—	5.0	86	8†	20	30	50	3.04	—	0.00	T.	6	8	12	11	...	
Skidmore.	Lawrence.	1,000	5	47.8	—	86	8	23	29	50	0.95	—	0.35	T.	4	15	0	16	sw.		
Somerset.	Somerset.	2,250	53	46.2	—	2.2	82	8	26	13	48	2.36	—	0.44	T.	9	6	15	10	...	
Uniontown.	Fayette.	989	21	50.0	—	4.0	84	10†	28	29†	39	3.44	—	0.44	T.	6	7	11	13	n.	
Warren.	Warren.	1,137	20	45.0	—	5.9	78	9	23	20	42	2.96	—	0.03	T.	2.0	6	12	2	17	hw.
West Virginia.																					
Aborvista.	Pocahontas.	...	1																		
Bancroft.	Putnam.	5	51.6																		
Beckley.	Raleigh.	2,440	10	50.1	—	3.9	84	10	23	29	50	2.88	—	1.53	T.	8	21	3	7	nw.	
Ben's Run.	Pleasants.	632	6	52.2	—	87	9	28	17	45	2.27	—	0.01	T.	10	4	8	6	w.		
Bluefield.	Mercer.	2,563	12	51.8	—	3.6	77	20	21	25	38	2.49	—	0.80	T.	8	22	3	6	...	
Buckhannon.	Upshur.	1,472	13	47.8	—	5.0	78	9†	19	29	48	5.27	—	2.13	T.	7	19	3	9	...	
Cairo.	Ritchie.	667	7	50.6	—	86	10	18	29	49	2.41	—	0.95	T.	7	18	7	6	w.		
Central Station.	Doddridge.	900	9	47.3	—	7.0	83	9†	16	29	48	2.03	—	0.26	T.	10	15	9	7	se.	
Charleston.	Kanawha.	598	6	54.8	—	87	9†	26	29	37	2.05	—	0.44	T.	5	16	7	6	w.		
Creston.	Wirt.	612	7	50.6	—	82	9	20	17	44	2.67	—	0.76	T.	10	19	3	9	w.		
Cuba.	Jackson.	544	7	49.5	—	85	9†	18	29	47	2.51	—	0.90	T.	9	18	7	6	sw.		
Doane.	Wayne.	4																			
Elkhorn ^a .	McDowell.	1,933	14	51.8	—	3.6	76	8	23	29	41	0.60	—	1.73	T.	0	3	10	1	sw.	
Elkins.	Randolph.	1,940	10	47.6	—	3.8	81	9	22	29	44	4.58	—	2.16	T.	9	15	6	10	w.	
Fairmont.	Marion.	870	4																		
Glenville.	Gilmer.	738	14	51.2	—	3.4	85	9	20	29	47	3.23	—	0.37	T.	7	18	3	10	sw.	
Grafton.	Taylor.	985	16	50.3	—	4.5	86	9	22	29	50	3.45	—	0.99	T.	12	18	2	11	...	
Green Sulphur Springs.	Summers.	1,600	12																		
Hinton ^b .	do.	1,400	13	52.0	—	4.1	75	9†	24	29	35	2.66	—	0.52	T.	0	22	1	6	w.	
Huntington.	Cabell.	510	12	51.4	—	4.7	84	10	23	29	41	1.84	—	0.21	T.	7	18 ^a	3	10 ^a	w.	
Lewisburg ^a .	Greenbrier.	2,200	8	49.0	—	4.0	82	9	18	26	45	3.59	—	1.01	T.	4	16	3	9	w.	
Logan.	Logan.	665	7	57.0	—	88	9	25	29	47	1.75	—	0.85	T.	7	16	18	1	w.		
Lost Creek.	Harrison.	1,033	11	49.6	—	4.6	85	9	18	29	50	3.28	—	1.00	T.	7	20	4	7	w.	
Madison.	Boone.	704	4	51.2	—	89	9	21	27	47	1.40	—	0.53	T.	8	18	8	5	sw.		
Mannington.	Marion.	907	6	48.8	—	85	9	19	29	51	2.19	—	0.85	T.	0	11	19	2	10	sw.	
Martinton ^a .	Monongalia.	1,250	13	51.2	—	3.7	83	10	27	29	37	2.55	—	0.43	T.	2.0	12	3	7	sw.	
Moundsville.	Pocahontas.	2,169	10																		
New Cumberland.	Marshall.	640	6	51.4	—	86	9†	24	29	47	2.02	—	0.68	T.	7	16	2	7	w.		
New Martinsville.	Hancock.	987	9	48.4	—	5.6	85	9	22	26	40	5.05	—	0.80	T.	5	14	3	14	w.	
Nuttallburg.	Wetzel.	634	14	52.2	—	4.1	88	10	25	29	48	2.09	—	0.29	T.	0	24	2	5	sw.	
Parkersburg.	Fayette.	2,252	12	47.2	—	71	9	20	29	48	2.59	—	0.39	T.	6	22	7	7	s.		
Parsons ^a .	Wood.	638	21	50.8	—	3.8	81	10	23	29	36	1.74	—	0.70	T.	0	8	18	7	6	
Philippl.	Tucker.	1,662	7	47.0	—	5.5	83	9	22	26	49	4.35	—	1.89	T.	0	6	16	4	10	
Pickens ^a .	Barbour.	1,192	10	49.0	—	4.8	84	9†	21	29	50	4.21	—	1.63	T.	0.2	14	10	11	nw.	
Pinevilles ^a .	Randolph.	2,785	16	46.5	—	5.4	77	9	19	29	58	5.09	—	1.65	T.	4.0	18	3	9	w.	
Point Pleasant.	Wyoming.	1	53.2																		
Powellton ^b .	Mason.	553	14	51.6	—	5.8	82	10	22	29	42	2.40	—	0.08	T.	0	6	7	15	ne.	
Princeton.	Fayette.	904	13	53.6	—	0.7	84	9	24	29	42	4.49	—	0.15	T.	0	6	11 ^a	5	14 ^a	
Robertsburg.	Mercer.	2,409	6	46.2	—	69	9†	17	29	42	3.70	—	1.70	T.	4	14	13	4	w.		
Ryan.	Putnam.	693	5	48.4	—	85	8†	21	29	48	2.57	—	1.00	T.	0	6	15	7	w.		
Smithfield.	Roane.	5	47.6	—	77	9	21	29	43	4.11	—	1.49	—	0.00	T.	8	18	6	7	sw.	
Spencer.	Roane.	710	6	49.2	—	86	9	15	23	29	4.28	—	0.34	T.	0	7	18	5			

TABLE 1.—Climatological data for October, 1909. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Ohio—Cont'd.</i>																					
Cincinnati.	Hamilton.	628	39	52.7	- 4.3.	81	8	29	25	35	3.02	+ 0.70	1.24	0.0	9	17	5	9	se.	U. S. Weather Bureau.	
Circleville.	Pickaway.	694	15	49.8	- 6.1	82	9	24	29	41	2.78	+ 1.14	0.96	T.	7	16	7	8	s.	Samuel W. Courtright.	
Clarington.	Monroe.	600	7	50.4	.....	86	9	21	29	45	2.26	.....	0.75	0.0	10	16	5	10	sw.	Col. S. Tschapart.
Clarkesville.	Clinton.	1,010	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. T. M. Williams.	
Columbus (1).	Franklin.	918	32	49.9	- 4.2	79	9	29	13	29	2.77	+ 0.42	1.17	T.	10	15	9	7	sw.	U. S. Weather Bureau.	
Columbus (2).	do.	757	27	48.6	- 3.5	80	9	24	29	41	1.59	- 0.56	0.82	T.	5	12	13	6	w.	Ohio State University.	
Columbus (3).	do.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Paul Mason.	
Columbus Reservoir.	Coshocton.	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.04	.....	1.35	T.	6	6	10	15	sw.	Superintendent.
Coshocton.	Montgomery.	790	27	50.0	- 4.3	82	7†	24	29	42	4.19	+ 1.93	1.65	0.0	8	15	10	6	w.	Mrs. Ada Jeffries.	
Dayton (1).	do.	16	.....	.....	.....	.....	.....	.....	.....	.....	4.36	+ 2.09	1.54	0.0	7	26	5	5	ne.	Edith E. L. Boyer.
Dayton (2).	Delaware.	927	13	47.8	- 6.6	82	9	21	29	45	2.67	+ 0.49	1.12	T.	9	15	4	12	sw.	Mrs. D. D. Rist.	
Demos.	Belmont.	1,325	20	50.8	- 2.0	85	9†	26	13	38	2.19	- 0.17	0.87	T.	8	20	6	5	sw.	L. L. Hudson.	
Frankfort.	Ross.	750	17	51.0	- 3.6	73	9	23	29	40	2.77	+ 0.89	1.20	T.	4	19	4	8	sw.	J. F. Dysart.	
Garretttsville.	Portage.	1,005	25	46.6	- 3.0	81	8†	20	29	48	1.55	+ 0.94	0.53	T.	11	11	7	13	nw.	O. A. Cory.	
Granville.	Licking.	960	25	48.4	- 4.2	80	9	22	29	42	3.00	+ 0.59	1.35	T.	6	19	6	7	sw.	S. M. Luther.	
Gratiot.	do.	1,000	19	48.2	- 4.7	77	9†	21	29	38	2.34	+ 0.30	0.89	T.	6	14	12	5	w.	Dr. L. E. Davis.	
Green.	Adams.	500	17	51.9	- 4.0	80	8†	22	29	44	2.77	+ 0.53	1.07	0.0	4	18	6	7	nw.	W. B. Longstreth.	
Green Hill.	Columbiana.	1,135	18	45.8	- 5.0	82	9	22	19†	48	1.21	- 0.90	0.64	T.	7	15	12	4	sw.	W. F. Kenyon.	
Greenville.	Darke.	1,060	24	48.8	- 3.2	78	8†	26	13†	36	4.21	+ 2.32	1.86	T.	7	11	13	7	s.	Jos. E. Bentley.	
Hillsboro.	Highland.	501	1	50.1	.....	80	8†	24	29	36	2.97	.....	1.05	T.	6	14	8	9	sw.	G. A. Katzenberger.
Ironton.	Lawrence.	575	27	52.6	- 2.6	84	8†	22†	29	47	2.09	- 0.39	0.90	0.0	7	17	5	9	sw.	Carey H. Roush.	
Jacksonburg.	Butler.	975	22	51.0	- 5.4	83	8	25	13	34	3.25	+ 3.17	2.40	0.0	5	15	8	6	ne.	James Bull.	
Kenton.	Hardin.	7	48.4	.....	84	9	23	29	41	2.79	.....	1.46	T.	7	16	8	6	w.	Dr. J. B. Owsley.	
Killbuck.	Holmes.	1,087	17	47.2	- 5.2	78	9†	23	19†	36	1.94	- 0.01	0.72	0.0	5	13	5	5	n.	N. S. Martin.	
Lancaster.	Fairfield.	898	14	50.0	- 5.2	80	9	24	29	37	2.68	+ 0.73	0.89	0.0	5	21	2	8	sw.	Geo W. Nowells.	
Lawshe.	Adams.	900	6	49.4	.....	83	8	18	29	48	2.94	.....	0.56	T.	6	19	1	11	w.	Ruth W. Hoffman.
McConnelsville.	Morgan.	710	26	49.4	- 4.1	84	10	20	29	44	2.27	- 0.03	0.81	T.	7	16	7	8	nw.	C. H. Morris.	
Marietta.	Washington.	627	66	51.3	- 1.6	78	9†	23	29	37	1.94	- 0.93	0.75	0.0	9	18	6	7	n.	Prof. T. D. Biscoe.	
Marion.	Marion.	980	19	49.0	- 5.5	85	9	21	29	45	2.62	+ 0.54	1.20	T.	6	14	8	9	se.	E. H. Raffensperger.	
Milfordton.	Knox.	1,200	17	48.6	- 3.1	80	8†	21	29	40	2.73	+ 0.82	1.03	T.	4	15	9	7	sw.	L. H. Burgess.	
Milligan.	Perry.	875	16	47.4	- 6.3	82	9	17	29	50	2.16	- 0.20	0.77	0.0	7	17	7	7	sw.	V. C. Eveland.	
Millport.	Columbiana.	1,145	18	46.8	- 5.5	81	9	22	19†	46	1.17	- 0.88	0.50	T.	6	8	17	6	sw.	G. F. Copeland.	
Nellie.	Coshocton.	850	9	47.5	.....	81	9†	21	17†	46	1.82	- 0.12	0.75	T.	4	19	5	7	w.	E. L. Gamertsfelder.
New Alexandria.	Jefferson.	1,050	25	50.9	- 3.0	85	9	24	27	41	1.74	- 0.73	0.73	T.	9	16	4	11	sw.	Mrs. Mary K. Pennell.	
New Berlin.	Stark.	1,100	17	47.9	- 3.8	81	9	22	29	38	1.86	- 0.35	0.95	T.	7	8	4	9	nw.	Clayton Holl.	
New Richmond.	Clermont.	788	11	47.0	- 4.6	82	9	21	29	48	1.73	- 0.34	1.05	T.	10	0	12	sw.	Sam. C. Scott.		
New Waterford.	Columbiana.	1,053	16	47.0	.....	82	9	21	29	48	1.73	.....	1.05	T.	10	0	12	sw.	C. B. Wade.	
North Lewisburg.	Champaign.	1,065	21	48.0	- 5.3	80	9	22	25†	38	3.25	+ 0.88	1.05	T.	8	14	14	3	sw.	J. N. Ridenour.	
Orangeville.	Trumbull.	945	21	48.0	- 5.3	81	9†	25	19†	37	2.21	+ 0.31	0.83	T.	5	16	11	4	sw.	L. C. Burckhalter.	
Pataskala.	Licking.	1,050	17	48.0	- 5.4	81	9†	25	19†	37	2.21	+ 0.31	0.83	T.	7	18	10	3	se.	Louis Hardtha.	
Philo (1).	Muskingum.	1,018	15	49.9	- 5.4	81	9†	20	29	45	2.58	.....	0.85	T.	6	18	4	9	w.	F. E. Stewart.
Philo (2)§.	do.	6	50.0	.....	83	9†	20	29	45	2.58	.....	0.85	T.	7	16	7	8	w.	W. G. Branch.	
Plattsburg.	Clark.	1,130	17	48.7	- 5.6	79	7†	23	29	36	3.52	+ 1.40	1.46	T.	6	18	4	9	w.	Dr. H. A. Schirrmann.	
Pomeroy.	Meigs.	781	26	53.6	- 1.8	83	10	27	25	39	1.85	- 0.08	1.05	0.0	7	16	7	8	w.	J. B. Gish.	
Portsmouth.	Scioto.	527	79	51.5	- 4.1	80	10	28	25	37	2.32	- 0.39	0.81	T.	7	17	3	11	w.	T. B. Arnett.	
Rittman.	Wayne.	990	17	47.8	- 3.3	89	9	21	29	41	1.43	- 0.98	0.72	0.0	6	20	6	5	w.	H. E. Blake.	
Shenandoah§.	Richland.	1,100	18	46.0	- 6.3	81	9	20	29	38	2.17	+ 0.27	1.15	T.	7	11	16	4	sw.	Miss M. C. Sheridan.	
Sidney.	Shelby.	985	15	51.1	- 3.0	83	9	24	29	41	3.52	+ 1.17	1.33	0.0	10	14	8	9	nw.	W. A. Webster.	
Somerset.	Perry.	1,080	11	49.2	- 6.8	80	9	27	29	34	2.68	+ 0.39	1.00	T.	8	19	7	5	n.	D. Thomas.	
Springfield.	Clark.	4	48.2	.....	84	9	18	29	52	2.28	.....	1.91	T.	8	14	11	6	sw.	W. G. Branch.	
Summerfield.	Noble.	696	17	52.5	- 4.0	84	10	21	29	41	2.13	+ 0.05	0.90	0.0	4	15	7	9	w.	H. R. McClintock.	
Thurman.	Gallia.	1,021	14	49.0	- 5.0	82	7†	21	29	44	2.97	+ 0.79	1.66	T.	4	13	13	5	sw.	M. D. McCorkle.	
Urbana.	Champaign.	1,031	14	49.0	- 4.1	84	9	21	29	44	2.97	+ 0.79	1.66	T.	6	13	8	10	nw.	D. Lorbach.	
Warren.	Trumbull.	12	47.5	- 4.1	84	9	21	29	46	0.80	- 1.41	0.33	T.	6	18	1	12	w.	Charles Michener.		
Waverly.	Pike.	590	27	51.0	- 4.2	84	8	20	29	47	1.98	- 0.16	0.72	T.	9	18	1	12	w.	Experiment Station.	
Waynesville.	Warren.	700	25	50.0	- 5.5	80	8†	25	25†	36	3.71	+ 1.72	1.50	0.0	6	17	7	7	sw.	G. R. Patton.	
Wooster.	Mahaning.	1,030	25	47.8	- 3.2	81	9†	22	29	43	2.16	- 0.15	1.02	0.0	7	8	0	23	w.	S. G. Sprague.	
Youngstown.	Haywood.	2,293	16	50.0	- 3.6	74	9	24	29	39	3.06	- 0.18	0.80	T.	4	16	7	8	w.	John W. Fox, sr.	
Zanesville.	Cherokee.	550	18	52.7	- 2.0	76	9	25	13	43	2.22	- 0.05	1.15	0.0	5	23	2	6	w.	Agric. Experiment Sta.	
Big Stone Gap.	Montgomery.	2,170	48.2	- 4.2	76	8†	17	29	48	2.24	- 0.44	1.70	0.0	4	17	7	7	n.	C. H. Greerer.		
Blacksburg.	Tazewell.	3,250	14	46.0	- 3.7	76	9	14	29	37	2.60	- 0.57	1.65	T.	3	15	6	10	w.	Henry Nicoll.	
Burksgarden.	Lee.	3,243	6	54.7	- 1.7	76	9	27	13†	34	2.06	- 0.59	1.25	T.	7	19	5	7	sw.	E. C. Williams.	
Elk Knob.	Grayson.	2,300	50.2	50.2	.....	76	9	20	29	45	3.17	.....	2.82	0.0	3	21	7	3	nw.	Miss Alice G. Jewett.
Galax.	Wythe.	2,028	5	48.9	- 3.0	70	9	25	29	36	2.18	.....	1.36	0.0	7	20	6	5	w.	S. W. State Hospital.
Ivanhoe**.	Smyth.	2,224	14	49.8	- 3.0</td																

MONTHLY WEATHER REVIEW.

OCTOBER, 1909

TABLE 1.—Climatological data for October, 1909. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Total snowfall unmeasured.	Number of partly cloudy days.	Number of clear days.	Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.							
						Date.	Lowest.	Date.	Total.	Date.	Lowest.							
Alabama—Cont'd.																		
Riverton.	Colbert.	360	12	59.7	-1.3	91	5	30	24	45	1.97	-0.98	1.22	0.0	5	21	3	e.
Scottsboro.	Jackson.	652	26	59.0 ^b	-1.4	90	5	25	25	56	3.01	+0.73	2.15	0.0	5	22	6	3.....
Tuscumbia.	Colbert.	488	27	59.4	-1.6	91	5	32	13	45	3.33	+1.21	2.67	0.0	4	20	1	10se.
Tennessee.																		
Ashwood.	Maury.	725	31	58.8	-0.9	84	4	26	25	45	2.60	-0.11	2.15	0.0	2	22	3	6w.
Benton.	Polk.	880	23	58.0	-1.4	89	4	25	25	44	4.50	+1.89	1.73	0.0	4	18	5	5s.
Byrdstown.	Pickett.	1,026	15	57.7	-0.7	83	31	25	13	46	1.63	-0.87	0.57	0.0	8	10	18	3s.
Carthage.	Smith.	500	27			87	4				3.41	+1.12	1.83	0.0	5	20	3	3sw.
Cedar Hill.	Robertson.	625	12	59.2	-2.0	85	4	30	25	37	1.85	-0.34	1.00	0.0	4	23	6	2s.
Chattanooga.	Hamilton.	808	31	59.6	-1.2	86	4	33	25	33	3.28	+0.44	2.51	0.0	5	24	3	4w.
Clarksville.	Montgomery.	520	43	58.8	-0.9	87	22	28	13	42	1.47	-0.87	0.67	0.0	4	25	3	3n.
Decatur.	Melges.	850	14	57.1	-2.7	87	4	23	25	45	3.11	-0.20	1.20	0.0	6	25	3	3sw.
Dickson.	Dickson.	800	13	57.4	-2.9	90	23	13	43	1.89	-0.50	0.77	0.0	4	19	10	2n.	
Dover.	Stewart.	515	15	50.0	-1.2	90	31	26	25	51	1.78	-0.62	0.68	0.0	3	20	7	4s.
Dunlap.	Sequatchee.	726		58.4		91	4	22	25	56	3.48		1.78	0.0	4			s. B. Boyd.
Elizabethton.	Carter.	1,575	20	57.7	+0.8	82	8	26	25	53	2.68	+0.62	1.26	0.0	5	22	5	4w.
Erasmus.	Cumberland.	1,850	13	52.6	-3.4	82	41	19	25	49	2.12	-1.64	0.96	T.	5	25	3	3se.
Florence.	Rutherford.	560	24	57.4	-2.0	83	4	26	25	35	2.46	+0.06	1.44	0.0	3	26	2	3s.
Franklin.	Williamson.	655	18	57.9	-1.6	86	5	28	13	40	1.59	-0.87	1.02	0.0	3	22	4	5
Harriman.	Roane.	841	14	55.7	-3.0	83	4	25	25	49	2.28	-0.44	1.20	0.0	4	15	15	1.....
Hohenwald.	Lewis.	988	24	56.8	-1.4	88	4	23	13	43	3.00	+0.67	1.84	0.0	4	19	0	3sw.
Iron City.	Lawrence.	12	57.8	-2.8	91	5	23	13	44	1.77	-0.80	1.12	0.0	3	18	0	13nw.	
Johnsonville.	Humphreys.	364	14	57.7	-2.8	86	31	23	13	45	2.73	+0.43	1.02	0.0	5	25	2	4s.
Jonesboro.	Washington.	1,740	13															
Knoxville.	Knox.	977	39	57.2	-0.9	82	4	30	25	36	1.61	-1.00	1.00	0.0	5	18	9	4n.
Lebanon.	Wilson.	522	50 ^a			88	4	26	25	42	2.62		1.88	0.0	3	20	2	9s.
Lewisburg.	Marshall.	727	16	58.2	-2.0	82	4	24	25	47	2.87	-0.28	1.93	0.0	3	25	4	4s.
Lynville.	Giles.	770	21	57.6	-2.4	85	5	29	13	37	2.06	-0.57	1.55	0.0	2	25	6	0n.
McMinnville.	Warren.	1,011	26	56.8	-1.5	85	4	25	25	46	2.47	-0.25	1.87	0.0	4	17	16	4n.
Maryville.	Blount.	1,050	15	57.4	-3.5	84	4	25	25	42	2.41	-0.11	0.98	0.0	5	25	2	4w.
Mountain City.	Johnson.	2,436	13	50.2	-2.8	76	8	19	25	49	3.59	+0.85	1.34	T.	4	21	3	2s.
Nashville.	Davidson.	654	39	59.9	-0.4	87	4	30	25	38	1.01	-1.47	0.60	0.0	4	23	5	5w.
Newport.	Cocke.	1,280	19	53.0 ^b	-4.6	78	5	25	25	32	2.70	+0.93	1.40	0.0	3	25	5	1w.
Palmatoo.	Bedford.	770	16	59.8	-2.4	92	4	27	25	44	3.43	+0.73	2.25	0.0	2	23	5	3w.
Pinewood.	Hickman.	3	59.0 ^a			91	4	23	25	47	2.43		1.23	0.0	5	21	6	4s.
Pope.	Perry.	13	57.3	-3.3	90	5	21	25	42	2.30	-0.53	0.70	0.0	4	26	1	4s.	
Rogersville.	Hawkins.	1,150	26	55.0	-1.5	83	4	25	29	47	2.16	-0.28	1.03	0.0	4	26	5	5w.
Ruby.	Morgan.	1,410	32	53.1	-2.1	83	3	16	25	52	1.18	-1.20	0.90	T.	3	18	6	5n.
Savannah ^a .	Hardin.	442	26	57.7	-2.6	81	19	30	13	34								
Sevierville.	Sevier.	4	55.8			86	4	23	29	49	2.47		1.20	0.0	3	18	8	5sw.
Sewanee.	Franklin.	2,000	15	57.4	-1.2	83	5	30	13	37	3.47	-0.87	1.98	0.0	2	28	0	3s.
Sparta.	White.	820	4	57.1	-4.2	81	2	21	29	55	1.98	-0.47	1.51	0.0	3	23	4	4w.
Springdale.	Calion.	1,058	7	51.8	-1.3	80	4	22	13	48	1.87	-0.26	0.99	0.0	6	25	4	2s.
Springville.	Henry.	377	7	57.3	-1.3	80	4	23	13	48	1.87	-0.26	0.99	0.0	6	25	4	2s.
Tellico Plains.	Monroe.																	
Tullahoma.	Coffee.	1,075	21	56.7	-1.3	87	4	24	25	42	3.88	+1.08	1.72	0.0	3	23	6	2s.
Waynesboro.	Wayne.	753	23	58.6	-0.3	89	5	25	13	42	3.80	+1.74	3.15	0.0	4	22	5	4s.
Widerville.	Henderson.			58.8	-1.4	87	41	29	13	53	1.39	-1.54	0.50	T.	4	20	8	3s.
Yukon.	Lincoln.	850	14	50.8	-2.0	87	5	30	25	31	1.46	-1.45	1.36	0.0	2	24	6	1w.
Kentucky.																		
Alpha.	Clinton.	15	57.8	-1.8	80	9	25	29	43	0.95	-1.71	0.42	0.0	3	21	2	8w.	
Anchorage.	Jefferson.	700	8	51.7		83	8	26	25	45	3.87		1.06	0.0	8	16	6	9sw.
Bardstown.	Nelson.	637	13	56.0	-3.3	86	5	25	13	45	2.18	+0.42	1.57	0.0	8	23	0	8sw.
Beattysville.	Lee.	650	6	52.7		87	9	19	29	56	1.80		0.80	0.0	8	13	3	15nw.
Beaverdam.	Ohio.	441	6	56.4		82	3	23	13	52	2.08		1.23	0.0	4	20	7	7nw.
Beres.	Madison.	1,070	8	54.6		83	9	20	28	41	1.22		0.45	0.0	6	20	8	3sw.
Bowling Green.	Warren.	500	20	58.6	-0.3	88	37	23	25	48	1.88	-0.21	1.03	0.0	7	19	10	1s.
Burnside.	Pulaski.	588	19			89	3	25	29	41	1.35		0.93	0.0	20	7	4	7n.
Cadiz.	Trigg.	7	57.8			89	31	23	13	45	2.04		1.08	0.0	4	24	4	3s.
Calhoun.	McLean.	397	6	58.4		91	3	27	13	52	2.20		0.96	0.0	7	19	9	3n.
Catlettsburg.	Boyd.	544	16	53.8	-4.1	84	9	24	29	44	1.76	-0.75	0.48	0.0	7	23	4	4nw.
Eadington.	Hopkins.	370	20	57.3	-2.1	90	3	24	23	48	1.95	-0.47	1.23	0.0	5	26	1	4s.
Edmonton.	Metcalfe.	600	18	55.7 ^b	-1.4	87	3	23	13	45 ^a	2.29	+0.07	0.75	0.0	3	21	6	4s.
Eubank.	Pulaski.	1,177	15	52.3	-4.8	81	31	22	25	41	0.89	-1.15	0.47	0.0	6	20	7	7ne.
Falmouth.	Pendleton.	530	20			89	31	23	13	45	2.56	+0.32	0.91	0.0	6	19	4	9sw.
Farmers.	Rowan.	668	4	51.8	+0.1	84	8	18	29	53	2.00		0.68	0.0	8	19	3	9e.
Frankfort.	Franklin.	560	19	53.0	-2.9	80	3	27	25	38	2.10	+0.91	1.31	0.0	8	17	4	10sw.
Franklin.	Simpson.	691	16	58.6	-0.4	82	3	27	13	45	1.68	-0.19	1.20	0.0	8	14	16	1nw.
Greensburg.	Green.	581	17	55.3	-1.4	92	7	20	25	57	2.30	-0.63	1.70	0.0	7	20	1	1n.
Highbridge.	Jessamine.	762	7			89	8	25	13	42	0.96		0.96	0.0	7	20	2	9....
Hopkinsville.	Christian.	524	13	60.8	+0.1	84	7	27	13	44	2.25	+0.42	0.90	0.0	5	23	2	6s.
Irvington.	Breckinridge.	11	55.1			84	3	27	13	45	2.54	+0.88	0.35	0.0	4	22	4	5sw.
Letchfield.	Grayson.	635	14	55.3	-3.1	84	3	25	13	40	1.80</td							

TABLE 1.—Climatological data for October, 1909. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.						Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.			
<i>Indiana—Cont'd.</i>																						
Cambridge City	Wayne.	941	10	47.6	-5.7	83	81	20	29	48	5.32	+ 3.42	1.50	T.	7	20	2	9	w.	Charles Lemberger.		
Columbus	Bartholomew.	632	18	50.5	-3.7	81	81	23	29	42	4.99	-2.82	1.19	0.0	9	19	4	8	sw.	John A. Perry.		
Connersville	Fayette.	789	20	49.2	-3.7	83	81	22	29	45	4.38	+ 2.17	1.32	T.	8	20	4	7	nw.	C. C. Hibbs.		
Delphi	Carroll.	668	16	47.2	-4.5	82	8	22	29	48	2.43	-0.75	0.97	T.	8	9	13	9	nw.	R. L. Higginbotham & Son		
Eminence	Morgan.	782	10	49.8	-1.2	80	8	24	13	40	3.78	-2.60	0.0	0.0	3	20	5	6	nw.	Dr. E. E. Kelso.		
Evansville	Vanderburg.	386	10	56.8	-1.2	89	3	32	13	31	2.04	-1.06	0.83	0.0	9	14	12	5	nc.	U. S. Weather Bureau		
Farmersburg	Sullivan.	50.6*	81*	8	24	13	37	5.33	1.25	0.0	7	2.21	1.15	0.0	7	18	0	13	nw.	Maurice Yeager.		
Farmland	Randolph.	1,101	20	49.0	-3.8	77	9	23	13	31	3.98	+ 2.21	1.15	0.0	7	1	22	8	w.	W. J. Davison.		
Greenfield	Hancock.	905	—	50.9	—	83	8	25	13	34	4.65	—	1.37	0.0	5	19	3	9	w.	W. C. Goble.		
Greensburg	Decatur.	954	5	51.8	—	80	81	26	13	34	4.81	—	1.26	0.0	5	19	3	6	sw.	Charles H. Ewing.		
Heltonville	Lawrence.	—	51.2*	—	86*	8	21	12	47	5.44	—	2.12	0.0	8	20	5	6	sw.	E. L. Palmer.			
Huntingburg	Dubois.	53.9	—	85	—	25	31	43	4.86	—	1.35	0.0	7	31	—	5	5	sw.	H. Dufendach.			
Huntington	Huntington.	741	11	48.4	-5.1	78	9	25	13	34	3.19	+ 0.53	1.25	T.	8	15	7	9	sw.	Charles McGrew.		
Indianapolis	Marion.	823	33	50.6	-4.4	78	8	26	13	30	3.23	+ 0.44	1.18	T.	8	15	6	10	s.	U. S. Weather Bureau.		
Jeffersonville	Clark.	455	12	54.8	-2.6	85	3	27	29	38	4.15	+ 2.21	1.70	0.0	10	18	9	4	w.	John C. Loomis.		
Judyville	Warren.	45.74	—	83	—	19	13	41	2.44	—	0.96	T.	10	14	3	14	4	s.	D. R. Warrick.			
Kokomo	Howard.	540	11	47.4	-7.4	79	9	22	29	39	3.26	+ 0.91	1.40	T.	9	18	4	9	sw.	John W. Doty.		
Lafayette	Tippecanoe.	617	22	48.6	-4.4	81	8	24	13	33	2.90	+ 0.45	0.95	T.	7	17	5	9	s.	W. J. Jones, Jr.		
Logansport	Cass.	620	17	48.7	-4.4	84	81	25	29	45	2.19	+ 0.27	0.92	0.0	8	20	3	8	e.	Charles Massena.		
Madison	Jefferson.	460	11	53.3	-4.8	83	87	27	29	38	3.55	+ 1.49	1.40	0.0	6	18	7	6	e.	J. Cooperider.		
Marengo	Crawford.	363	19	52.0	-4.8	84	3	25	13	42	4.58	+ 1.38	1.19	0.0	8	18	6	7	sw.	J. M. Johnson.		
Marion	Grant.	814	14	48.8	-4.5	83	9	24	29	40	2.94	+ 1.16	1.21	T.	10	17	5	9	sw.	James F. Hood.		
Maury	Huntington.	814	10	46.4	-7.3	80	9	22	29	41	3.05	+ 0.41	1.40	T.	4	14	12	5	sw.	I. S. Shideler.		
Moore's Hill	Rush.	980	21	49.5*	-1.9	84	9	23	13	43	4.92	+ 2.53	1.31	0.0	10	17	5	9	w.	E. Kirkwood.		
Mount Vernon	Dearborn.	—	50.8	—	80	81	25	13	35	4.40	—	1.60	0.0	10	23	6	8	se.	W. S. Bigney.			
Paoli	Posey.	470	15	56.2	-0.4	90	3	27	13	47	4.09	+ 1.55	3.13	0.0	5	24	2	5	n.	C. M. Spaeber.		
Princeton	Orange.	611	5	51.8	—	84	3	20	13	46	4.58	—	1.22	0.0	8	16	8	7	ne.	James A. Gillum.		
Richmond	Gibson.	481	19	54.6	-0.8	87	3	23	13	42	4.68	+ 2.52	1.45	0.0	6	23	3	5	—	Elisha Jones.		
Rochester	Wayne.	972	17	48.3	-4.9	82	9	22	29	43	5.77	+ 3.37	1.79	T.	8	13	11	7	—	Walter Vossler.		
Rockville	Fulton.	775	15	47.8	—	73	9	26	13	26	2.12	—	1.50	0.0	6	10	14	7	—	J. P. Keith.		
Rome	Parke.	722	15	50.6	-4.0	80	8	23	13	32	4.21	+ 1.89	1.57	T.	10	15	6	10	s.	Dr. W. N. Wirt.		
Salem	Perry.	370	—	50.3	—	88	8	26	13	47	2.54	—	0.98	0.0	9	14	11	6	w.	Adam Ansprach.		
Salmonia	Jay.	—	48.2*	—	81*	9	23	29	40*	2.97	—	1.38	T.	7	13	4	13	sw.	C. V. Skinner.			
Washington	Washington.	717	11	51.1	-5.3	83	3	23	13	43	4.50	+ 1.84	1.25	0.0	8	19	6	6	nw.	E. S. Allen.		
Scottsburg	Scott.	570	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	F. H. Park.		
Seymour	Jackson.	610	14	52.1	-3.4	83	8	23	29	44	3.84	+ 1.09	1.08	0.0	8	16	8	7	w.	J. R. Blair.		
Shelbyville	Shelby.	59.6	—	81	—	25	13	40	5.36	—	1.64	0.0	12	13	13	5	5	s.	B. F. Crouch.			
Terre Haute	Vigo.	498	11	52.7	-5.4	82	8	26	13	35	4.38	+ 2.13	1.24	0.0	9	17	3	11	ne.	R. G. Gillum.		
Veedersburg	Fountain.	612	11	51.0*	—	82*	87	23	13	41	3.32	—	0.90	T.	11	19	3	9	s.	L. A. Culver.		
Vevay	Switzerland.	525	19	52.7	-4.5	79	87	27	29	36	4.00	+ 2.03	1.60	T.	6	14	8	9	sw.	Miss Frederica Boerner.		
Vincennes	Knox.	431	10	53.0	-5.0	85	8	23	13	42	4.10	+ 1.61	1.30	T.	7	17	4	10	s.	G. V. List.		
Washington	Davies.	484	7	52.8	—	85	2	25	13	42	4.03	—	1.22	0.0	9	24	1	6	se.	H. B. Turrell.		
Whitestown	Boone.	—	48.1	—	76	51	—	—	—	34	3.58	—	1.14	T.	8	14	7	10	n.	C. A. Stevenson.		
Winona Lake	Kosciusko.	—	49.6	—	81	87	26	13	38	2.29	—	1.34	1.0	0.0	6	8	19	4	w.	Rev. A. A. Young.		
Worthington	Greene.	526	20	52.3	-3.0	84	8	24	13	41	1.74	+ 2.15	1.08	T.	8	10	14	6	—	C. A. Geckler.		
Illinois	Edwards.	531	17	53.9	-2.7	88	3	23	13	43	2.68	+ 0.55	0.80	0.0	5	23	1	7	s.	B. F. Michels.		
Cairo	Alexander.	359	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	U. S. Weather Bureau.		
Charleston	Coles.	720	18	51.1	-4.0	81	8	25	13	38	2.80	+ 0.22	1.57	0.0	8	16	6	9	s.	Jacob B. Dazey.		
Equality	Gallatin.	421	9	58.8	-0.7	94	3	27	13	41	1.98	-0.69	1.20	0.0	4	21	6	4	w.	Dr. L. W. Gordon.		
Fairfield	Wayne.	495	15	54.8	-3.2	89	3	21	13	43	1.86	-0.24	0.71	0.0	5	17	1	13	nw.	George A. Tromly.		
Flora	Clay.	495	23	54.2	-1.2	90	3	25	13	42	4.50	+ 2.20	1.70	0.0	8	18	6	7	nw.	Jos. S. Peak.		
Golconda	Pope.	500	30	56.4	-3.2	90	3	25	13	44	1.39	-1.26	1.27	0.0	2	18	10	3	nw.	Dr. D. Lawrence.		
Hoopeson	Vermillion.	715	7	48.6	—	78	8	23	13	31	2.10	—	0.63	T.	9	17	3	11	—	S. F. Hoskinson.		
McLeanshoro	Hamilton.	462	26	55.2	-1.8	89	3	24	13	37	1.52	-0.59	0.33	0.0	6	18	5	7	se.	C. C. Judd.		
Martinsville	Clark.	630	20	52.5	-2.9	86	8	21	13	44	3.10	+ 1.37	1.25	T.	5	17	5	9	s.	G. M. Daugherty.		
New Burnside	Johnson.	556	14	57.6	-1.3	87	4	29	14	39	0.83	-1.75	0.83	0.0	1	16	9	6	s.	George Harris.		
Oleyne	Richland.	486	19	54.7	-1.6	89	3	24	13	42	3.60	+ 1.51	1.57	0.0	8	15	9	7	se.	Victor E. Phillips.		
Palestine	Crawford.	500	28	54.3	-0.9	84	4†	22	13	39	3.11	+ 0.71	0.80	0.0	5	14	8	9	sw.	Alexander Charley.		
Paris	Edgar.	600	12	50.0	-4.6	80	8	23	13	34	3.25	+ 1.30	1.70	0.0	3	17	10	4	nw.	H. W. Twymann.		
Philo	Champaign.	700	24	49.2	-3.7	81	8	23	13	40	3.21	+ 1.10	0.80	T.	8	15	9	7	nw.	H. A. Burr.		
Rantoul	do.	768	18	50.0	-4.2	83	8	23	13	38	2.40	+ 0.58	0.65	T.	9	17	4	10	se.	Wm. Breiner.		
Robinson	Crawford.	500	9	54.2	-2.8	83	7†	24	13	46	3.18	+ 0.56	0.92	0.0	8	21	2	8	sw.	A. P. Woodworth.		
Summers	Lawrence.	459	—	53.8	—	86	3	24	13	35	3.18	—	1.62	0.0	4	20	3	8	nw.	O. A. Fyffe.		
Tuscola	Douglas.	644	10	50.6	-3.8	85	7	22	13	47	3.28	+ 1.16	1.64	T.	6	23	4	4	s.	E. W. Lester.		
Urbania	Champaign.	725	7	49.0	—	80	8	21	13	34	2.25	—	1.16	T.</								

TABLE 2.—*Daily precipitation for October, 1909. District No. 3, Ohio Valley.*

TABLE 2.—*Daily precipitation for October, 1909.* District No. 3—Continued.

TABLE 2.—*Daily precipitation for October, 1909. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for October, 1909. District No. 3—Continued.*

MONTHLY WEATHER REVIEW.

OCTOBER, 1909

TABLE 3.—Maximum and minimum temperatures at selected stations, October, 1909. District No. 3, Ohio Valley.

Date.	Pennsylvania.				West Virginia.												Ohio.											
	Greenvile.		Pittsburg.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington.		Morgantown.		Parkersburg.		Wheeling.		Canton.		Cincinnati.		Columbus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1...	53	46	56	48	71	45	67	36	62	40	68	40	69	41	64	45	65	48	63	43	56	41	70	44	65	42	70	36
2...	56	37	60	42	70	47	71	39	61	33	69	35	71	40	67	48	66	38	64	35	60	36	73	45	63	43	73	37
3...	60	35	59	40	71	43	69	37	66	34	74	35	73	40	66	36	70	38	67	35	63	35	79	50	69	48	77	45
4...	60	47	63	42	71	42	72	40	67	39	74	37	73	44	69	37	66	45	65	38	59	40	72	49	65	43	72	40
5...	72	35	70	47	73	42	69	48	72	38	73	36	74	39	73	49	72	41	70	40	63	40	70	46	69	41	72	38
6...	75	33	73	44	74	48	69	46	73	42	76	43	76	42	71	44	73	45	70	43	69	41	77	48	73	44	79	38
7...	78	34	75	43	74	46	72	43	75	39	77	41	76	43	78	39	73	40	71	37	78	48	77	48	82	40	81	40
8...	81	31	78	44	77	48	75	49	77	37	83	40	73	43	80	59	73	44	71	40	74	39	81	50	73	49	82	40
9...	83	38	79	48	78	50	74	48	81	37	85	38	82	41	80	51	81	45	76	41	78	42	81	51	79	52	83	42
10...	79	43	80	56	78	53	75	50	78	41	83	40	84	43	83	56	81	50	80	41	77	48	69	51	74	56	75	58
11...	69	49	67	48	74	53	69	48	63	46	71	51	67	50	73	49	66	50	59	43	64	42	53	44	60	44	60	44
12...	51	36	51	35	67	41	59	39	50	35	55	41	51	39	51	42	51	38	49	42	48	32	44	32	44	33	51	28
13...	44	29	42	31	55	32	50	37	43	32	51	25	54	28	44	31	50	32	48	31	43	30	48	29	51	28	55	42
14...	53	26	52	41	66	40	53	39	59	33	58	31	62	31	53	37	45	36	54	37	58	43	56	38	55	42	55	42
15...	52	31	47	38	63	42	55	38	46	36	55	36	53	39	51	42	41	30	48	31	51	39	47	38	45	36	55	36
16...	50	32	45	38	55	45	53	40	46	34	55	40	60	40	47	34	53	35	50	35	47	35	56	40	51	37	53	35
17...	54	39	52	36	57	42	69	31	53	29	58	34	55	30	53	32	54	28	57	26	53	32	50	36	55	33	54	27
18...	45	32	47	40	60	43	67	33	56	40	57	43	57	43	51	41	49	43	47	26	46	40	51	43	46	40	51	39
19...	53	24	48	32	59	48	72	37	53	33	58	34	57	39	50	30	54	35	56	31	50	28	54	38	52	33	56	28
20...	58	20	61	34	73	36	65	40	69	26	71	38	66	33	67	33	66	34	65	30	59	30	59	30	57	32	57	32
Mns	58.7	34.7	58.2	40.9	67.0	42.6	65.3*	33.4*	60.5	34.8	86.0	36.5	85.1	37.8	61.4*	40.9*	61.8	39.8	60.2	35.5	57.1	37.1	62.9	42.5	59.5	40.3	62.5	37.5

Date.	Ohio.				Virginia.				Tennessee.				Kentucky.				Ohio.				Virginia.				Tennessee.			
	Marion.		Waynes.		Big Stone Gap.		Wytheville.		Asheville, N. C.		Decatur, Ala. §§		Chattanooga.		Jonesboro.		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynesboro.		Beattyville, Ky. §§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1...	65	37	73	34	74	41	65	40	68	45	78	44	74	52	.....	73	48	76	47	77	47	73	42	79	43	76	37
2...	70	33	77	34	69	36	65	38	61	41	79	42	76	50	.....	74	45	79	46	82	40	76	39	80	44	79	35
3...	74	39	78	38	74	43	68	40	73	43	83	42	83	52	.....	79	48	88	50	87	45	81	43	85	43	85	40
4...	69	36	75	40	75	48	70	47	75	45	88	50	86	63	.....	82	59	87	65	92	56	82	50	88	49	82	44
5...	72	38	78	35	73	44	58	53	67	50	89	53	86	59	.....	78	56	94	60	89	58	81	54	89	51	79	37
6...	77	39	80	40	74	47	63	46	68	54	83	53	78	57	.....	76	54	80	50	84	48	80	47	86	46	82	38
7...	82	39	83	41	73	47	72	44	71	49	82	52	76	56	.....	74	55	80	49	84	45	78	42	82	44	85	41
8...	80	40	94	37	74	43	73	39	73	42	83	53	79	54	.....	76	51	81	55	82	47	81	46	82	44	83	41
9...	85	40	83	38	76	41	74	37	73	41	81	55	77	52	.....	79	48	79	55	82	47	78	44	87	39	87	39
10...	75	53	81	43	75	44	71	45	69	45	85	51	73	55	.....	76	53	72	52	70	52	72	53	69	51	84	42
11...	59	43	66	43	69	49	60	45	64	47	66	43	67	50	.....	67	49	66	45	60	44	66	44	66	41	68	44
12...	47	32	56	37	56	40	50	33	52	38	57	40	55	43	.....	54	38	55	38	57	45	57	36	55	33	53	36
13...	48	28	55	25	52	25	46	31	50	33	60	30	60	34	.....	54	33	62	32	62	28	62	25	62	22	62	22
14...	52	38	64	43	53	33	54	45	65	36	73	31	64	46	.....	63	41	67	46	68	48	64	45	73	50	65	29
15...	46	33	54	31	54	44	47	44	56	43	65	46	64	47	.....	61	46	64	44	63	43	65	40	59	34	65	34
16...	52	36	60	38	59	36	54	41	58	38	69	33	69	41	.....	65	40	70	43	73	36	73	32	70	35	66	28
17...	58	33	63	25	68	33	60	36	71	34	79	39	79	47	.....	74	44	80	51	81	48	81	41	80	47	56	30
18...	48	42	51	40	75	38	70	38	77	39	81	47	81	50	.....	73	44	81	55	86	42	82	47	78	37	73	37
19...	58	23	59	28	70	51	55	45	74	43	77	47	76	54	.....	74	54	69	50	70	52	80	53	71	50	59	42
20...	67	27	58	31	68	45	55	44	57	46	69	53	63	56	.....	68	53	72	55	74	56	73	53	74	59		

TABLE 3.—*Maximum and minimum temperature at selected stations, October, 1909. District No. 3—Continued.*

Date.	Kentucky.														Indiana.														Philo, Ill.
	Bowling Green, Ky.		Erlington, Ky.		Greensburg, Ky.		Lexington.		Louisville.		Maysville, Ky.		Williamsburg, Ky.		Butlerville.		Evansville.		Indianapolis.		Kokomo.		Rockville.		Worthington.				
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1...	82	42	89	40	76	35	68	45	73	48	74	39	.....	.....	74	35	73	48	70	40	67	34	70	40	75	37	72	35
2...	84	40	83	39	80	34	73	48	79	47	77	39	.....	.....	77	39	78	47	74	45	72	36	75	45	80	40	77	39
3...	83	45	90	42	88	35	79	52	83	53	82	40	.....	.....	79	45	89	58	75	53	73	48	73	56	83	50	76	52
4...	88	50	89	54	81	42	73	51	78	55	77	46	.....	.....	78	48	82	60	72	47	69	40	73	49	75	50	73	49
5...	85	52	80	53	78	44	70	47	74	49	75	38	.....	.....	78	42	76	55	67	44	67	37	69	46	75	46	70	44
6...	85	43	84	40	80	35	74	46	79	49	80	41	.....	.....	80	42	78	49	75	46	72	36	75	43	80	42	73	40
7...	86	44	87	41	92	35	78	56	82	50	83	41	.....	.....	84	44	80	51	77	51	77	38	78	47	83	42	79	39
8...	87	52	87	42	92	41	78	56	83	55	86	42	.....	.....	83	56	81	57	78	55	78	40	80	53	84	48	81	48
9...	83	49	79	52	92	43	79	55	80	56	85	42	.....	.....	82	57	77	60	76	57	79	45	78	55	81	54	76	53
10...	66	49	68	59	67	43	68	46	65	50	77	53	.....	.....	73	56	69	55	65	47	62	52	68	49	71	55	63	48
11...	68	44	64	43	66	33	53	39	58	42	64	43	.....	.....	60	45	56	42	51	37	53	38	50	39	55	44	50	39
12...	53	33	51	33	52	31	43	31	46	35	46	49	33	48	31	45	34	38	32	41	30	41	30	48	31	39	29
13...	63	26	64	24	61	21	52	27	57	31	56	26	.....	.....	52	27	59	32	48	26	48	25	49	23	52	24	47	23
14...	67	43	66	38	67	22	58	41	59	42	62	27	.....	.....	53	41	51	44	49	34	48	28	49	29	52	36	50	25
15...	63	39	62	37	61	34	53	37	58	40	53	34	.....	.....	54	34	60	40	48	36	43	31	52	32	60	31	58	28
16...	75	38	70	36	66	29	53	33	63	42	60	33	66	.....	59	34	65	44	53	34	51	32	54	32	63	31	55	29
17...	83	43	82	43	69	31	51	43	57	44	50	30	73	36	49	35	68	47	50	35	55	25	50	36	53	35	47	31	
18...	83	51	76	51	91	42	62	43	56	44	54	37	81	44	43	43	56	46	43	41	48	40	47	42	50	44	48	39	
19...	69	47	65	47	60	40	56	39	57	42	60	34	66	47	57	31	58	43	53	34	54	26	55	33	57	34	55	32	
20...	75	50	65	43	73	44	64	40	63	45	62	32	72	43	56	41	64	49	59	41	56	31	58	42	59	34	58	39	
21...	80	57	79	53	75	48	71	57	75	60	73	34	74	57	73	55	73	60	69	54	67	52	69	51	72	56	68	49	
22...	85	53	83	49	81	44	75	51	78	49	77	45	82	50	74	47	78	51	64	55	58	43	63	42	76	40	61	35	
23...	61	55	52	51	62	45	60	36	56	38	59	45	70	44	64	37	56	42	43	43	36	48	34	50	40	64	47	56	
24...	58	38	53	40	48	36	40	33	46	36	45	36	47	37	48	35	62	39	43	34	44	29	47	33	50	37	50	34	
25...	66	25	65	30	66	20	58	29	60	32	63	24	68	23	58	30	60	35	54	31	57	28	57	32	58	31	60	31	
26...	71	32	72	40	70	23	64	37	67	42	68	35	71	27	66	42	68	44	64	43	66	36	66	40	58	38	68	34	
27...	67	46	63	45	62	26	54	42	58	46	60	36	66	33	61	36	57	45	53	41	53	36	55	37	67	41	55	34	
28...	69	31	61	30	59	25	48	33	52	38	52	31	61	20	50	31	54	40	46	32	48	25	47	28	56	33	45	26	
29...	69	28	69	28	68	20	53	30	58	32	47	23	63	22	58	27	63	35	52	33	52	22	57	30	50	27	58	28	
30...	78	30	77	32	77	20	71	39	73	38	77	24	77	28	71	39	72	44	69	39	69	31	70	41	59	29	70	34	
31...	80	40	79	39	79	26	74	48	77	50	79	29	77	30	76	49	75	54	74	49	74	43	74	47	70	37	75	46	
Mns	74.7	42.4	72.4	41.9	77.0	33.6	63.3	42.4	66.1	41.7	66.6	35.5	.....	.....	65.3	40.5	66.8	46.7	60.1	41.0	59.7	35.2	61.2	40.1	65.1	39.5	61.4	37.0